CLAIMS

What is claimed is:

1. A method for processing message packets comprising:

sending a plurality of message packets from a network access layer device to a network layer component in a batch;

said network layer component classifying said plurality of message packets based upon connection, wherein packets are batched per transport connection; and

sending message packets destined for said particular connection in a batch to a transport layer component allocated for said particular connection.

2. The method as recited in Claim 1, wherein said sending a plurality of message packets comprises:

receiving said plurality of message packets in response to a blanking interval of said network access layer device; and

generating a single interrupt for sending said plurality of message packets to said network layer component in a single batch.

3. The method as recited in Claim 2, wherein said network access layer device does not perform any classifying of said plurality of message packets to identify a message connection.

4. The method as recited in Claim 1 wherein said classifying comprises identifying said particular connection based upon header information contained in said plurality of message packets.

5. The method as recited in Claim 1, wherein all of said plurality of message packets destined for said particular connection are sent to a connection queue.

6. The method as recited in Claim 1 further comprising:

assigning at least one message packet to a second connection;

receiving a second plurality of message packets from said network access layer device in a batch;

said network layer component classifying said second plurality of message packets wherein an additional message packet is assigned to said second connection; and

sending a plurality of message packets destined for said second connection to a transport layer component in a batch.

7. The method as recited in Claim 6, wherein said at least one message packet is a low priority message packet.

8. The method as recited in Claim 1, wherein said network access layer device is a network interface card and said network layer component is an internet protocol (IP) software module.

9. A method for exchanging data comprising:

generating a single interrupt for sending a plurality of message packets in a single batch from a network access layer device to a network layer component;

said network layer component classifying and batch processing said plurality of message packets, wherein a batch of message packets for a transport control protocol (TCP) connection is identified; and

said network layer component sending said batch of message packets destined for said particular TCP connection to a transport layer component in a single batch.

10. The method as recited in Claim 9 further comprising:

receiving said plurality of message packets in response to a blanking interval implemented on said network access layer device.

11. The method as recited in Claim 9, wherein said classifying comprises identifying said first message connection is based upon internet protocol (IP) header information contained in a first packet.

12. The method as recited in Claim 11 further comprising:

assigning at least one message packet to a second connection identified during said classifying;

receiving a second plurality of message packets in a batch from said network access layer device;

said network layer component assigning an additional message packet to said second connection in response to packet classification; and

sending a plurality of message packets destined for said second connection to a transport layer component in a single batch.

13. The method as recited in Claim 9, wherein said network access layer device is a network interface card and said network layer component is an internet protocol (IP) software module.

14. A computer-usable medium having computer-readable program code embodied therein for causing a computer system to perform a method for exchanging data comprising:

sending a plurality of message packets from a network access layer device to a network layer component in a single batch;

said network layer component classifying said plurality of message packets based on connection, wherein a connection is identified; and

sending all of said plurality of message packets destined for said connection in a batch to a transport layer component allocated for said connection.

15. The computer-usable medium of Claim 14, wherein said sending comprises:

receiving said plurality of message packets in response to a blanking interval of said network access layer device; and

generating a single interrupt for sending said plurality of message packets to said network layer component.

16. The computer-usable medium of Claim 14, wherein said network access layer device does not perform any classifying of said plurality of message packets to identify a connection.

17. The computer-usable medium of Claim 14 wherein said classifying comprises identifying said connection based upon header information contained in said plurality of message packets.

18. The computer-usable medium of Claim 14, wherein all of said plurality of message packets destined for said connection are sent to a connection queue.

19. The computer-usable medium of Claim 14 further comprising:

assigning at least one message packet to a second connection;

receiving a second plurality of message packets from said network access layer device in a batch;

said network layer component classifying said second plurality of message packets wherein an additional message packet is assigned to said second connection; and

sending a plurality of message packets destined for said second connection to a transport layer component in a batch.

20. The computer-usable medium of Claim 14, wherein said network access layer device is a network interface card and said network layer component is an internet protocol (IP) software module.

21. A computer system comprising:

a bus;

a memory coupled with said bus;

a processor coupled with said bus, said processor for executing a method for performing a method for exchanging data comprising:

sending a plurality of message packets from a network access layer device to a network layer component in a single batch;

said network layer component classifying said plurality of message packets based on connection, wherein a connection is identified; and

sending all of said plurality of message packets destined for said connection in a batch to a transport layer component allocated for said connection.

22. The computer system of Claim 21, wherein said sending comprises:

receiving said plurality of message packets in response to a blanking interval of said network access layer device; and

generating a single interrupt for sending said plurality of message packets to said network layer component.

23. The computer system of Claim 21, wherein said network access layer device does not perform any classifying of said plurality of message packets to identify a connection.

24. The computer system of Claim 21 wherein said classifying comprises identifying said connection based upon header information contained in said plurality of message packets.

25. The computer system of Claim 21, wherein all of said plurality of message packets destined for said connection are sent to a connection queue.

26. The computer-usable medium of Claim 21 further comprising:

assigning at least one message packet to a second connection;

receiving a second plurality of message packets from said network access layer device in a batch;

said network layer component classifying said second plurality of message packets wherein an additional message packet is assigned to said second connection; and

sending a plurality of message packets destined for said second connection to a transport layer component in a batch.

27. The computer system of Claim 21, wherein said network access layer device is a network interface card and said network layer component is an internet protocol (IP) software module.